

**REMARKS**

**I. Preliminary Matters**

Claims 1-2 and 5-15 are pending in the application, and all the claims are rejected.

Claim 1 is amended to recite that the fly ash used in the resin composition has two peaks in its particle size distribution. Support for the amendment to claim 1 can be found, for example, at paragraphs [0063]-[0065], Figs. 3-5 and the working Examples of the present specification.

Claim 15 is canceled without prejudice or disclaimer.

No new matter is added, and Applicants submit that the amendment to claim 1 places the present application in condition for allowance. Accordingly, entry of the Amendment after a final Office Action is deemed appropriate. Upon entry of the Amendment, which is respectfully requested, claims 1-2 and 5-14 will be pending in the present application.

**II. Response to Claim Rejections Under 35 U.S.C. § 103(a)**

(i) Claims 1, 2, 5, 8 and 12-13 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Hwang et al (WO 99/37592; hereafter Hwang I) in view of Goodwin (U.S. Patent No. 3,331,671);

(ii) Claims 5-7 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Hwang I in view of Goodwin, Chang (U.S. Patent No. 5,505,766) and Nomura et al (machine translated JP 2001-220193);

(iii) Claim 11 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Hwang I in view of Goodwin and Nodera et al (U.S. Patent No. 5,837,757);

(iv) Claims 9-10 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hwang I in view of Goodwin and Hwang (U.S. Patent No. 5,047,145; hereafter Hwang II);  
and,

(v) Claim 15 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Hwang I with evidence provided by Bennett (U.S. Patent No. 4,229,329).

Initially, without acquiescing to the merits, claim 15 is canceled.

Applicants respectfully submit that claims 1-2 and 5-14 are patentable, at least for the following reasons.

**Patentability of Amended Claim 1**

Amended claim 1 recites a flame-retardant resin composition comprising a polycarbonate type resin and fly ash which contains particles composed of a complex of silicon dioxide and aluminum oxide and has a 50% particle size (D50) of 1 to 10  $\mu\text{m}$  and has two peaks in its particle size distribution.

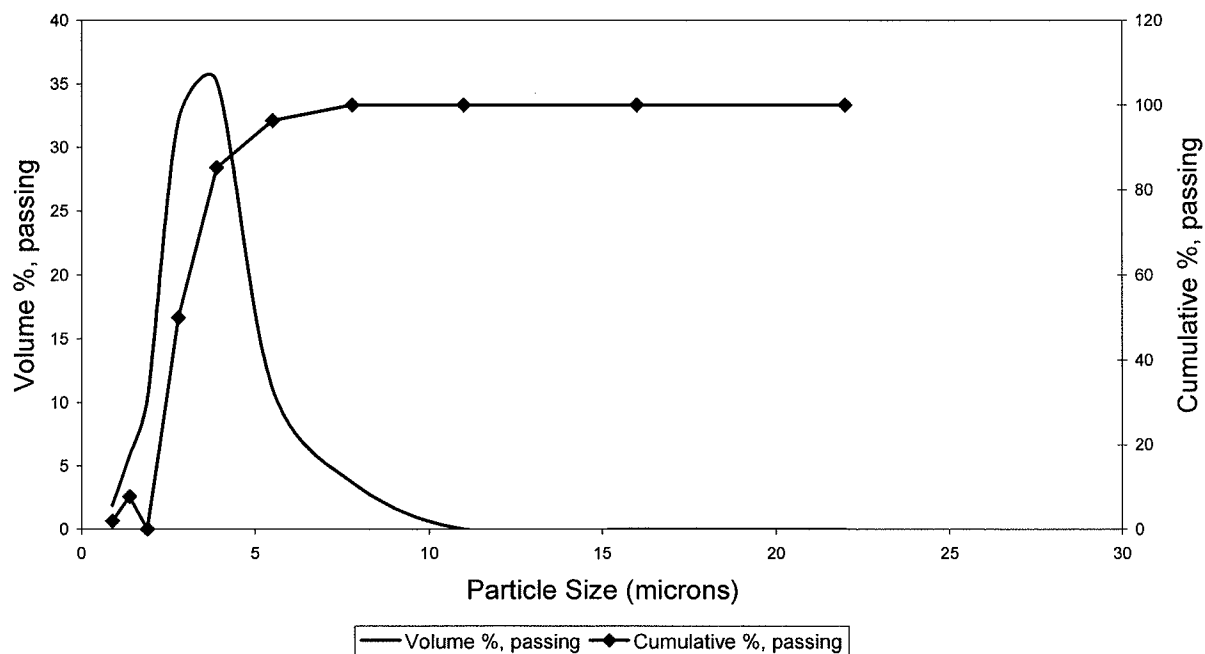
Furthermore, paragraph [0064] of the present specification discloses that the fly ash, FA-A4, has two particle size distribution peaks at 1.5  $\mu\text{m}$  and 6.0  $\mu\text{m}$ , and that this kind of bimodal distribution is unique. Paragraph [0065] of the present specification further goes on to state that when the fly ash has the above discussed unique bimodal distribution, the resin composition containing the fly ash is stable, has good flame retardancy, and reduction in moldability is suppressed. The bimodal distribution of the fly ash of the presently claimed invention can be seen, at least, at Figs. 3-5 of the present specification.

In contrast, the fly ash of Hwang I has a single peak in its particle size distribution. For example, consider the particle size distribution curve of Table 4 of Hwang I, as shown in Fig. A below. Table 4 of Hwang I is also reproduced below. Fig. A clearly shows that the fly ash of Hwang, as disclosed in Table 4, has a single peak in its particle size distribution. Therefore, the composition of Hwang I is inferior in flame retardation as compared with that of the presently claimed invention.

Table 4 of Hwang I

Particle size (μm)	Cumulative %, passing	Volume %, passing
22	100	0
16	100	0
11	100	0
7.8	100	3.7
5.5	96.3	11.1
3.9	85.2	35.2
2.8	50	32.1
1.9	17.9	10.2
1.4	7.7	5.8
0.9	1.9	1.9

**Fig. A**



Accordingly, Applicants respectfully submit that claim 1 is patentable over Hwang I. Moreover, Goodwin does not cure the above discussed deficiency in Hwang I.

**Patentability of Claims 2 and 5-14**

Claims 2 and 5-14 are patentable over Hwang I, at least by virtue of their dependence from claim 1, and further because none of Goodwin, Chang, Nomura, Nodera, Hwang II or Bennett cures the above identified deficiency in Hwang I with respect to claim 1.

Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103 rejections of claims 1, 2 and 5-14.

**Conclusion**

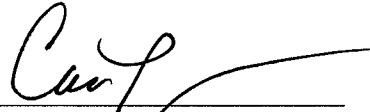
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116  
Application No.: 10/590,237

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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